

CLAIMS

What is claimed is:

1. A software architecture comprising:
an artifact layer containing a plurality of application independent artifacts; and
a configuration layer containing at least one application, said application including a plurality of states in which said application executes instructions, wherein said states exist within execution spaces that are distributed across a network, and wherein said application uses artifacts of said artifact layer.
2. The architecture of claim 1, wherein at least one of said applications is an electronic commerce application, such that different execution spaces defined for said application are associated with different business entities involved with an electronic commerce transaction, whereby said electronic commerce application represents a business process integration solution relating to electronic commerce.
3. The architecture of claim 1, further comprising:
a template layer containing a plurality of application independent templates, each of said templates comprising a plurality of related artifacts that together define at least one functionality, wherein at least a one of said applications are constructed using at least one of said templates.
4. The architecture of claim 1, further comprising:
an element layer containing a plurality of artifact independent elements, wherein at least a one of said artifacts are constructed using at least one of said elements.
5. The architecture of claim 1, wherein at least one of said artifacts comprises an adaptive document.
6. The architecture of claim 1, wherein at least one of said artifacts comprises a process flow.

7. The architecture of claim 1, wherein at least one of said artifacts comprises a screen flow.
8. The architecture of claim 1, wherein at least one of said artifacts comprises an adaptor.
9. The architecture of claim 8, wherein said adaptor is at least one of a transport adaptor and a data adaptor.
10. A system for conducting electronic commerce comprising:
 - an architecture for electronic commerce applications comprising a plurality of application independent artifacts;
 - a commerce server configured to process said artifacts in a state defined by a finite-state automata; and
 - a plurality of electronic commerce applications that conform to standards of said architecture, each electronic commerce application tailored for at least one particular business entity that conducts electronic commerce, wherein electronic commerce transactions involving multiple ones of said electronic commerce applications are performed, and wherein at said commerce server is utilized during the execution of said electronic commerce transactions.
11. The system of claim 10, wherein said artifacts comprise:
 - at least one adaptive document comprising electronic commerce data, wherein said adaptive document can be conveyed among a plurality of defined states, and wherein functionality of said adaptive document is dependant upon a state within which said adaptive document is disposed.
12. The system of claim 11, wherein said artifacts further comprise:
 - at least one process flow configured to convey at least one of said adaptive documents from one defined state to another defined state responsive to an occurrence of a system event.

13. The system of claim 11, wherein said artifacts further comprise:
at least one adaptor for adapting messaging protocols to facilitate a conveyance of at least one adaptive document across a network.
14. The system of claim 10, wherein said artifacts further comprise:
at least one adaptor for mapping data from one data structure to another data structure.
15. The system of claim 10, wherein said artifacts further comprise:
at least one screen flow configured to model interactions within interfaces of said electronic commerce applications.
16. The system of claim 10, further comprising:
at least one template comprising a plurality of said artifacts, wherein said template establishes default values during a construction of said electronic commerce applications.
17. A system for conducting electronic commerce transactions comprising:
a plurality of applications used by different businesses, wherein different ones of said applications are tailored for business processes unique to specific ones of said businesses, and wherein multiple ones of said applications are utilized to conduct at least one electronic commerce transaction; and
a plurality of artifacts utilized by said applications to conduct said electronic commerce transactions, wherein said artifacts are application independent, and wherein at least a portion of said artifacts are selected from the group consisting of an adaptive document, a process flow, an adaptor, and a screen flow.
18. The system of claim 17, further comprising:
a commerce server configured to coordinate interactions of said artifacts among said applications.

19. The system of claim 18, wherein said commerce server further comprises a state engine for managing a plurality of states defined for said electronic commerce transactions, wherein at least a portion of said artifacts include state-dependant features.

20. The system of claim 18, wherein said commerce server further comprises a development engine containing tools to facilitate construction of said applications, wherein said development engine tools utilize predefined ones of said artifacts as building blocks for constructing said applications.

21. The system of claim 18, wherein said commerce server further comprises an administrative graphical user interface.

22. The system of claim 18, wherein said commerce server further comprises an artifact engine.

23. A method for conducting an electronic commerce transaction comprising the steps of:

- initializing an electronic commerce transaction;
- inputting commerce data into an adaptive document, wherein actions of said adaptive document are dependent upon a state of said adaptive document;
- conveying said adaptive document to a different location; and
- performing at least one electronic commerce action upon said adaptive document, wherein said electronic commerce action utilizes application independent algorithms.

24. The method of claim 23, further comprising the steps of:

- inputting commerce data into an electronic document; and
- converting said data from a format of said electronic document to a format of said adaptive document using a data adaptor.

25. The method of claim 23, said conveying step further comprising the steps of:
establishing a communication link between two locations that adheres to a messaging protocol defined by a transport adaptor; and
conveying said adaptive document using said communication link and said messaging protocol.
26. The method of claim 23, said performing step further comprising the step of:
altering a state of said adaptive document based upon instructions detailed within a process flow.
27. The method of claim 23, further comprising the steps of:
after said performing step, conveying said adaptive document to another location;
converting data within said adaptive document from a format of said adaptive document to a format of an electronic document; and
presenting at least a portion of said electronic document containing said converted data within an application of said another location.
28. A machine-readable storage having stored thereon, a computer program having a plurality of code sections, said code sections executable by a machine for causing the machine to perform the steps of:
initializing an electronic commerce transaction;
inputting commerce data into an adaptive document, wherein actions of said adaptive document are dependent upon a state of said adaptive document;
conveying said adaptive document to a different location; and
performing at least one electronic commerce action upon said adaptive document, wherein said electronic commerce action utilizes application independent algorithms.

29. The machine-readable storage of claim 28, further comprising the steps of:
inputting commerce data into an electronic document; and
converting said data from a format of said electronic document to a format of said adaptive document using a data adaptor.
30. The machine-readable storage of claim 28, said conveying step further comprising the steps of:
establishing a communication link between two locations that adheres to a messaging protocol defined by a transport adaptor; and
conveying said adaptive document using said communication link and said messaging protocol.
31. The machine-readable storage of claim 28, said performing step further comprising the step of:
altering a state of said adaptive document based upon instructions detailed within a process flow, wherein actions of said adaptive document are dependent upon a state of said adaptive document.
32. The machine-readable storage of claim 28, further comprising the steps of:
after said performing step, conveying said adaptive document to another location;
converting data within said adaptive document from a format of said adaptive document to a format of an electronic document; and
presenting at least a portion of said electronic document containing said converted data within an application of said another location.
33. A system for conducting an electronic commerce transaction comprising:
means for initializing an electronic commerce transaction;
means for inputting commerce data into an adaptive document, wherein actions of said adaptive document are dependent upon a state of said adaptive document;
means for conveying said adaptive document to a different location; and

means for performing at least one electronic commerce action upon said adaptive document, wherein said electronic commerce action utilizes application independent algorithms.